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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/727,706	12/03/2003	Avetik Harutyunyan	23085-08287	8632
758	7590	11/30/2005		
FENWICK & WEST LLP SILICON VALLEY CENTER 801 CALIFORNIA STREET MOUNTAIN VIEW, CA 94041			EXAMINER BOECKMANN, JASON J	
			ART UNIT	PAPER NUMBER
			3752	

DATE MAILED: 11/30/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

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Office Action Summary

Application No.

10/727,706

Applicant(s)

HARUTYUNYAN ET AL.

Examiner

Jason J. Boeckmann

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☐ Claim(s) 1-15 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-5, 8-11, 14 and 15 is/are rejected.
- 7) ☒ Claim(s) 6, 7, 12, 13 and 16-19 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 12/03/2003 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date: ____. |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date <u>6/30/2005</u> . | 6) <input type="checkbox"/> Other: ____.  |

## **DETAILED ACTION**

### ***Drawings***

The drawings are objected to because they are too dark and will not print well. It is difficult to determine what is going on with the particles inside the container.

Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

***Claim Objections***

Claim 19 is objected to because of the following informalities: Examiner believes that claim 19 should be dependent on claim 18 rather than claim 15. If that is the case, appropriate correction is required.

***Claim Rejections - 35 USC § 112***

Claim 8 recites the limitation "one portion" and "the other portion" in lines 6 and 7. There is insufficient antecedent basis for this limitation in the claim.

Claim 15 recites the limitation "one portion" and "the other portion" in line 12. There is insufficient antecedent basis for this limitation in the claim.

***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 8 and 9, as well as understood, and 10 are rejected under 35 U.S.C. 102(b) as being anticipated by Gianella et al (4,863,316).

Gianella et al shows an apparatus for injecting dry powder comprising a container, a means for creating aerosol within the container (26, 28), a conduit having an inlet end (31), an opposite end (98), an ejector (54) located between the first end

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(31) and the opposite end (98) and powder (14) confined between the ejector (54) and the opposite end (98). Pressurized gas (28) is introduced through the first end (31), and the opposite end (98) is bifurcated wherein one portion discharges the powder and the other portion (84) connects back to the ejector (54). Regarding claim 9, the pressurized gas is argon (column 4, line 18). Regarding claim 10, the first end (31) comprises a tube (86).

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

Claims 1 and 2 are rejected under 35 U.S.C. 103(a) as being unpatentable over Gianella et al (4,863,316).

Gianella et al shows an apparatus for injecting dry powder comprising a container, means for creating an aerosol (28, 26) of the dry powder (14) within the

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container, a conduit (86) having an inlet end and a discharge end, wherein the inlet end comprises an ejector (54) and introduces a pressurized gas, argon (column 4, line 18), into the container and the discharge end is bifurcated wherein one portion (84) connects to the ejector and the other portion discharges the powder. The container also has a shaker (18) for shaking the container. Gianella et al does not specifically disclose that the conduit is located at the upper portion of the container. However, it would have been obvious to one of ordinary skill in the art at the time of the applicant's invention to locate the conduit and the ejector at the upper portion of the container in order to pick up the powder from a more uniform, less concentrated section of the container.

Claims 3, 4 and 5 are rejected under 35 U.S.C. 103(a) as being unpatentable over Gianella et al (4,863,316) in view of Spaulding et al (4,561,808).

Gianella et al shows all aspects of the applicants invention as in claim 1, but does not specifically disclose that the ratio of the diameter of the ejector to the inlet is about 0.4 to about 0.6 and that the dry powder comprises a metal catalyst supported on a powdered oxide substrate wherein the powdered oxide substrate has a particle size of 0.5 microns to 5 microns. However, Spaulding et al discloses that the ratio of the diameter of the smallest cross-section of the ejector (34), to the inlet or the largest cross-section (31) is about 0.4 to about 0.6 (column 4, lines 35-9) and the powdered material used in the injector is a composite metal-oxide powder having a particle size of up to 5.0 microns (column 3, lines 5-8). It would have been obvious to one of ordinary skill in the art at the time of the applicant's invention to substitute the ejector (34) and powdered oxide material of Spaulding et al for the ejector (54) and powder material (14)

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of Gianella et al in order to prevent the powdered particles from getting jammed in the ejector.

Claim 11 is rejected under 35 U.S.C. 103(a) as being unpatentable over Gianella et al (4,863,316) in view of Stein (5,727,732).

Gianella et al shows all aspects of the applicant's invention as in claim 8, but does not specifically disclose that the tube is composed of a material selected from the group consisting of glass, plastic, ceramic or metal. However, Stein shows a flexible aerosol delivery tube (12) that is made of copper. It would have been obvious to one of ordinary skill in the art at the time of the applicant's invention, under the teachings of Stein, to make the tube (86) of Gianella et al out of copper to make it easier to bend yet strong enough to withstand high pressure.

Claim 14 is rejected under 35 U.S.C. 103(a) as being unpatentable over Gianella et al (4,863,316) in view of Spaulding et al (4,561,808).

Gianella et al shows all aspects of the applicant's invention as in claim 8, but does not specifically disclose that the powder comprises a metal catalyst supported on a powdered oxide substrate wherein the particle size is 0.5 microns to 5.0 microns. However, Spaulding et al discloses that the material in the powder feeder is a composite metal-oxide powder having a particle size of up to 5.0 microns (column 3, lines 5-8). It would have been obvious to one of ordinary skill in the art at the time of the applicant's invention to use the composite metal-oxide powder having a particle size of up to 5.0 microns of Spaulding et al instead of the powder particles of Gianella et al, to allow for a uniform mixture of the gas and powder materials.

### ***Allowable Subject Matter***

Claims 6, 7, 12 and 13 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Claims 16-19 would be allowable if rewritten to overcome the rejection(s) under 35 U.S.C. 112, 2nd paragraph, set forth in this Office action and to include all of the limitations of the base claim and any intervening claims.

### ***Conclusion***

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Duncan et al (3,746,254) shows a powder spray system with a container and a vibrator. Savino et al (5,145,293) shows a similar powder pickup device that fluidizes the powder particles.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jason J. Boeckmann whose telephone number is (571) 272-2708. The examiner can normally be reached on 7:30 - 5:00 m-f, first Friday off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David A. Scherbel can be reached on (571) 272-4919. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.



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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

JJB

JJB

11/28/05



**David A. Scherbel**  
**Supervisory Patent Examiner**  
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